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Application Serial Number: __10 712,533__

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Revised 05/17/04

IFWO

RAW SEQUENCE LISTING   DATE: 08/10/2004
PATENT APPLICATION: US/10/712,533   TIME: 11:50:29

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Output Set: **N:\CRF4\08102004\J712533.raw**

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 9 <120> TITLE OF INVENTION: ANTIGENES DE PLASMODIUM FALCIPARUM ET LEURS APPLICATIONS
10       VACCINALES ET DIAGNOSTIQUES
14 <130> FILE REFERENCE: 000466-0035
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C--> 18 `<140> CURRENT APPLICATION NUMBER: US/10/712,533`
C--> 18 `<141> CURRENT FILING DATE: 2003-11-14`
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18 <150> PRIOR APPLICATION NUMBER: CA 2,345,206
20 <151> PRIOR FILING DATE: 2001-05-16
24 <150> PRIOR APPLICATION NUMBER: CA 2,346,968
26 <151> PRIOR FILING DATE: 2001-05-23
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40 <211> LENGTH: 192
42 <212> TYPE: DNA
44 <213> ORGANISM: Plasmodium falciparum
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51 aatgttataa aaagtgataa taaaaatgtt ataaaaagtg ataataaaaa tgattataaa   120
53 aagtgtaata aaaatgttat aaaaagtgat aataaaaatg ttataaaaag tgataataaa   180
55 aatgtggaat tc                                                       192
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62 <212> TYPE: DNA
64 <213> ORGANISM: Plasmodium falciparum
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73 agagaagatc ctattgcttc tgaaactgaa gttgtaagtg aacctgagga ttcaagtagg   180
75 ataatgacta cagaagttcc aagtactact gtaaaacccc ctgatgaaaa acgatctgaa   240
77 gaagtaggag aaaaagaagc taaagaaatt aaagtagaac ctgttgtacc aagagccatt   300
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99             20                  25                  30
102 Ser Asp Asn Lys Asn Asp Tyr Lys Lys Cys Asn Lys Asn Val Ile Lys
103         35                  40                  45
```

Please use english for U.S. applications

Does Not Comply
Corrected Diskette Needed

RAW SEQUENCE LISTING   DATE: 08/10/2004
PATENT APPLICATION: US/10/712,533   TIME: 11:50:29

Input Set : A:\PTO.LM.txt
Output Set: N:\CRF4\08102004\J712533.raw

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127              20                  25                  30
130 Asp Asn Gln Ser Asn Val Leu Asn Arg Glu Asp Pro Ile Ala Ser Glu
131          35                  40                  45
134 Thr Glu Val Val Ser Glu Pro Glu Asp Ser Ser Arg Ile Met Thr Thr
135      50                  55                  60
138 Glu Val Pro Ser Thr Thr Val Lys Pro Pro Asp Glu Lys Arg Ser Glu
139 65                  70                  75                  80
142 Glu Val Gly Glu Lys Glu Ala Lys Glu Ile Lys Val Glu Pro Val Val
143              85                  90                  95
146 Pro Arg Ala Ile Gly Glu Pro Met Glu Asn Ser Val Ser Val Gln Ser
147          100                 105                 110
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154 <210> SEQ ID NO: 5
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176 <213> ORGANISM: Plasmodium falciparum
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188 <211> LENGTH: 6
190 <212> TYPE: PRT
192 <213> ORGANISM: Plasmodium falciparum
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208 <213> ORGANISM: Plasmodium falciparum
212 <400> SEQUENCE: 8
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    232 <222> LOCATION: (1)..(1524)
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    241 1               5                   10                  15
    243 gat tgg ata aac cag att ttt aaa aag aat tct tta caa tgt gat tta        96
    244 Asp Trp Ile Asn Gln Ile Phe Lys Lys Asn Ser Leu Gln Cys Asp Leu
    245             20                  25                  30
    247 tat ttt ttg gat gac aac aaa gaa aaa gat gtt agt aag aaa aga aaa       144
    248 Tyr Phe Leu Asp Asp Asn Lys Glu Lys Asp Val Ser Lys Lys Arg Lys
    249             35                  40                  45
    251 gct caa ttg aag gat gaa tat gat aat ata tca agg agc aaa gaa aat       192
    252 Ala Gln Leu Lys Asp Glu Tyr Asp Asn Ile Ser Arg Ser Lys Glu Asn
    253     50                  55                  60
    255 att aat aat tcc aaa aaa ata aaa aat gaa tta agt ata aaa gat aat       240
    256 Ile Asn Asn Ser Lys Lys Ile Lys Asn Glu Leu Ser Ile Lys Asp Asn
    257 65                  70                  75                  80
    259 atg cac gat tac ata tat gat gat cgt atc tac aat aat gat aaa gag       288
    260 Met His Asp Tyr Ile Tyr Asp Asp Arg Ile Tyr Asn Asn Asp Lys Glu
    261                 85                  90                  95
    263 aaa aat gtt ata aaa agt gat aat aaa aat gtt ata aaa agt gat aat       336
    264 Lys Asn Val Ile Lys Ser Asp Asn Lys Asn Val Ile Lys Ser Asp Asn
    265             100                 105                 110
    267 aaa aat gat tat aaa aag tgt aat aaa aat gtt ata aaa agt gat aat       384
    268 Lys Asn Asp Tyr Lys Lys Cys Asn Lys Asn Val Ile Lys Ser Asp Asn
    269         115                 120                 125
    271 aaa aat gtt ata aaa agt gat aat aaa aat gtt ata aaa agt gat aat       432
    272 Lys Asn Val Ile Lys Ser Asp Asn Lys Asn Val Ile Lys Ser Asp Asn
    273     130                 135                 140
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    276 Lys Asn Val Ile Lys Ser Asp Tyr Lys Ser Asp Asp Arg Asn Ala Cys
    277 145                 150                 155                 160
    279 gat att tat aaa agt aat aaa aaa aat gtt cct gat aat tgc cat ata       528
    280 Asp Ile Tyr Lys Ser Asn Lys Lys Asn Val Pro Asp Asn Cys His Ile
    281             165                 170                 175
    283 tat gat gat aat agt tca gtt gaa aat tta gat gga aaa aat aaa tta       576
    284 Tyr Asp Asp Asn Ser Ser Val Glu Asn Leu Asp Gly Lys Asn Lys Leu
    285             180                 185                 190
    287 aat aat ata agg aac ata cat aat gat aac tca tct tca tgc gat ata       624
    288 Asn Asn Ile Arg Asn Ile His Asn Asp Asn Ser Ser Ser Cys Asp Ile
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289         195              200·             205
291 tcc gat ata aaa agt gaa gat gaa tat ata gaa cca tat gaa aaa aag    672
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293     210              215              220
295 aat gaa gaa aat ata aat gaa tat aag aat aag aaa aat ata gcc aat    720
296 Asn Glu Glu Asn Ile Asn Glu Tyr Lys Asn Lys Lys Asn Ile Ala Asn
297 225              230              235              240
299 gaa aat ata aaa gaa gga aag agt tca att tat aat gat gaa cat aat    768
300 Glu Asn Ile Lys Glu Gly Lys Ser Ser Ile Tyr Asn Asp Glu His Asn
301              245              250              255
303 tat aat tca tta tta tat aat tct tgt aat ggt gaa ata agt aag atc    816
304 Tyr Asn Ser Leu Leu Tyr Asn Ser Cys Asn Gly Glu Ile Ser Lys Ile
305          260              265              270
307 aac aaa ata agt agt cat aat aat att gat aat aat atg gat aat tat    864
308 Asn Lys Ile Ser Ser His Asn Asn Ile Asp Asn Asn Met Asp Asn Tyr
309     275              280              285
311 aat acg ttt gca aat gtg aat aat ttt ata ata tat tcc tca gat gat    912
312 Asn Thr Phe Ala Asn Val Asn Asn Phe Ile Ile Tyr Ser Ser Asp Asp
313     290              295              300
315 gaa gat aat ata tca aat tat tat aat ggt aaa gac gta tta aat gat    960
316 Glu Asp Asn Ile Ser Asn Tyr Tyr Asn Gly Lys Asp Val Leu Asn Asp
317 305              310              315              320
319 gag att atg ttc cct ata aaa ttt aat ttt gaa aaa tta aaa aaa aat    1008
320 Glu Ile Met Phe Pro Ile Lys Phe Asn Phe Glu Lys Leu Lys Lys Asn
321              325              330              335
323 att tat gta ata gag cat ata gac aaa ata tat tat gat aca ttt tta    1056
324 Ile Tyr Val Ile Glu His Ile Asp Lys Ile Tyr Tyr Asp Thr Phe Leu
325              340              345              350
327 aat aaa aat cca agt gaa aaa agt gtt ttt atg aat gat gaa tct act    1104
328 Asn Lys Asn Pro Ser Glu Lys Ser Val Phe Met Asn Asp Glu Ser Thr
329     355              360              365
331 ggt tat ttg aaa aat gat gtg aat gac aaa tgt gtt gtt gat aat ata    1152
332 Gly Tyr Leu Lys Asn Asp Val Asn Asp Lys Cys Val Val Asp Asn Ile
333     370              375              380
335 aat gtt att aat cct tct agt gtg aat acg ttg agt aat att tca aat    1200
336 Asn Val Ile Asn Pro Ser Ser Val Asn Thr Leu Ser Asn Ile Ser Asn
337 385              390              395              400
339 att agg aat gaa aaa ata gaa aat aat aat aag aat gaa aaa tta ata    1248
340 Ile Arg Asn Glu Lys Ile Glu Asn Asn Asn Lys Asn Glu Lys Leu Ile
341              405              410              415
343 aaa tca tat cct aca caa tca aaa aat gtt atg agt aca ttt tcc ttt    1296
344 Lys Ser Tyr Pro Thr Gln Ser Lys Asn Val Met Ser Thr Phe Ser Phe
345              420              425              430
347 tgg aat att gaa aag gag aca ttt ata aca aaa cct ttg tat gca caa    1344
348 Trp Asn Ile Glu Lys Glu Thr Phe Ile Thr Lys Pro Leu Tyr Ala Gln
349              435              440              445
351 aat ttg aga aaa aaa caa ttt agt tta tta gat gaa tct gaa gag atg    1392
352 Asn Leu Arg Lys Lys Gln Phe Ser Leu Leu Asp Glu Ser Glu Glu Met
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355 ata aga aat tat tca tct aat caa tat tct ata aaa ttt gta cca aga        1440
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357 465                 470               475               480
359 cat tta tta tat gta atg agt caa gtt gct tct cga tcc ttt ttt gat        1488
360 His Leu Leu Tyr Val Met Ser Gln Val Ala Ser Arg Ser Phe Phe Asp
361                 485               490               495
363 cct tta tat aga aag cag tta ttt ttt cgt tac taa                        1524
364 Pro Leu Tyr Arg Lys Gln Leu Phe Phe Arg Tyr
365                 500               505

368 <210> SEQ ID NO: 10
370 <211> LENGTH: 507
372 <212> TYPE: PRT
374 <213> ORGANISM: Plasmodium falciparum

378 <400> SEQUENCE: 10
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385             20                25                30
388 Tyr Phe Leu Asp Asp Asn Lys Glu Lys Asp Val Ser Lys Lys Arg Lys
389         35                40                45
392 Ala Gln Leu Lys Asp Glu Tyr Asp Asn Ile Ser Arg Ser Lys Glu Asn
393     50                55                60
396 Ile Asn Asn Ser Lys Lys Ile Lys Asn Glu Leu Ser Ile Lys Asp Asn
397 65                70                75                80
400 Met His Asp Tyr Ile Tyr Asp Asp Arg Ile Tyr Asn Asn Asp Lys Glu
401             85                90                95
404 Lys Asn Val Ile Lys Ser Asp Asn Lys Asn Val Ile Lys Ser Asp Asn
405             100               105               110
408 Lys Asn Asp Tyr Lys Lys Cys Asn Lys Asn Val Ile Lys Ser Asp Asn
409         115               120               125
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413     130               135               140
416 Lys Asn Val Ile Lys Ser Asp Tyr Lys Ser Asp Asp Arg Asn Ala Cys
417 145               150               155               160
420 Asp Ile Tyr Lys Ser Asn Lys Lys Asn Val Pro Asp Asn Cys His Ile
421             165               170               175
424 Tyr Asp Asp Asn Ser Ser Val Glu Asn Leu Asp Gly Lys Asn Lys Leu
425             180               185               190
428 Asn Asn Ile Arg Asn Ile His Asn Asp Asn Ser Ser Ser Cys Asp Ile
429         195               200               205
432 Ser Asp Ile Lys Ser Glu Asp Glu Tyr Ile Glu Pro Tyr Glu Lys Lys
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437 225               230               235               240
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444 Tyr Asn Ser Leu Leu Tyr Asn Ser Cys Asn Gly Glu Ile Ser Lys Ile
445             260               265               270
448 Asn Lys Ile Ser Ser His Asn Asn Ile Asp Asn Asn Met Asp Asn Tyr
```

VERIFICATION SUMMARY   DATE: 08/10/2004
PATENT APPLICATION: US/10/712,533   TIME: 11:50:30

Input Set : **A:\PTO.LM.txt**
Output Set: **N:\CRF4\08102004\J712533.raw**

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L:18 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:238 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:9,Line#:234
L:538 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:11,Line#:524
L:548 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:11,Line#:534
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